

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

designated areas only. Remove and launder clothing if contaminated.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE	: -44 - 634 F	VAPOR DENSITY	: Is heavier than air
ODOR	: MINT WHEN WET	ODOR THRESHOLD	: N.D.
APPEARANCE	: CLEAR LIQUID	EVAPORATION RATE	: Is faster than Butyl Acetate
SOLUBILITY IN H2O	: PARTIALLY SOLUBLE	SPECIFIC GRAVITY	: 0.7253
FREEZE POINT	: N.D.	pH @ 0.0 %	: N.D.
VAPOR PRESSURE	: N.D.	VISCOSITY	: N.D.
PHYSICAL STATE	: LIQUID		
COEFFICIENT OF WATER/OIL DISTRIBUTION	: N.D.		

(See Section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat, sparks, welding arcs, open flame, pilot lights, static electricity or other source of ignition.

INCOMPATIBILITY: acids, strong oxidizers,

HAZARDOUS DECOMPOSITION PRODUCTS: carbon monoxide and carbon dioxide, various hydrocarbons,

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

No product or component toxicological information is available.

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, state and federal regulations.

(Continued on Page 5)

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Aerosols

DOT TECHNICAL NAME:

DOT HAZARD CLASS: 2.1

HAZARD SUBCLASS: NONE

DOT UN/NA NUMBER: UN1950

PACKING GROUP: NONE

RESP. GUIDE PAGE: 126

ADDITIONAL INFORMATION:: For domestic ground and air shipment this product may be shipped as a Consumer Commodity ORM-D. Outer cartons must have the ORM-D or ORM-D AIR designation. (our original cartons are preprinted with the ORM-D designation for ground shipment)

SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD FIRE HAZARD PRESSURIZED GAS HAZARD

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

----- CHEMICAL NAME -----	CAS NUMBER	WT/WT % IS LESS THAN
No SARA Section 313 components exist in this product.		

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

----- CHEMICAL NAME -----	CAS NUMBER
No information is available.	

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: No information available.

: On June 30, 1993 the OSHA Z-1-A table was revoked and OSHA reverted back to their prior exposure limits. The values on this MSDS reflect the roll

(Continued on Page 6)

SECTION 15 - REGULATORY INFORMATION

back to the prior values. Some states may continue to enforce the 1993 limits. On June 16, 1995 EPA announced in a final rule that acetone would no longer be considered a VOC for air attainment standards. (it is now an exempt compound) The VOC calculations on this MSDS are based on acetone being an exempt compound. The June 16 rule also removed acetone from the list of SARA 313 reportable chemicals.

SECTION 16 - OTHER INFORMATION

HMIS RATINGS - HEALTH: 2 FLAMMABILITY: 4 REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 09/18/03

REASON FOR REVISION: NEW FORMULA

VOC CONTENT: 22.3 % BY WEIGHT, 163 GRAMS/LITER TOTAL PRODUCT,
529 GRAMS/LITER LESS WATER AND EXEMPT, 0.20 LBS/CAN

LEGEND: N.A. - Not Applicable, N.E. - Not Established,
N.D. - Not Determined

:

The information contained on this MSDS is been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations. The environmental information and hazardous materials identification system have been included by Camie-Campbell Inc. in order to provide additional health and hazard classification information. The ratings recommend are based upon the criteria supplied by the developers of these rating systems, together with Camie-Campbell Inc.'s interpretation of the available data. Proper personal protective equipment varies widely with conditions of use and anticipated exposure. We recommend that a supervisor or other qualified person determine proper PPE for intended use.

<END OF MSDS>

M A T E R I A L S A F E T Y D A T A S H E E T

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**** DRAFT COPY -- FOR EVALUATION USE ONLY ****

PRODUCT NAME : L-7750 CLEANER
 IDENTIFICATION NUMBER: SFCL07750
 PRODUCT USE/CLASS :
 DATE PRINTED: 09/18/03

SUPPLIER: Camie-Campbell 9225 Watson Industrial Park St. Louis, MO 63126	MANUFACTURER: Camie-Campbell 9225 Watson Industrial Park St. Louis, MO 63126
EMERGENCY TELEPHONE: 800-424-9300 24 HOUR EMERGENCY PHONE	EMERGENCY TELEPHONE: 800-424-9300 24 HOUR EMERGENCY PHONE

PREPARED BY: JLM, PHONE: 314/968-3222, PREPARE DATE: 09/18/03
 REPLACES DATE: 09/18/03

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT % LESS THAN
01	ACETONE	67-64-1	80.0 %
02	PROPANE	74-98-6	25.0 %

EXPOSURE LIMITS						
ITEM	ACGIH		OSHA		COMPANY TLV-TWA	SKIN
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING		
01	500 ppm	750 ppm	1000 ppm	N.E.	N.E.	NO
02	2500 PPM	N.E.	1000 ppm	N.E.	N.E.	NO

(See Section 16 for abbreviation legend)

SECTION 3 - HAZARDS IDENTIFICATION

*** EMERGENCY OVERVIEW ***: Keep from reach of children. Do not puncture, incinerate, or place aerosol product containers in compactors. Containers of this material may be hazardous when emptied since containers retain product residues (vapor, liquid, and/or solid). All hazard precautions given must be observed. Do not flame cut, braze or use welding torch. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Can cause severe irritation, redness, tearing, blurred vision.

(Continued on Page 2)

SECTION 3 - HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Prolonged or repeated contact can cause moderate irritation defatting, dermatitis.

EFFECTS OF OVEREXPOSURE - INHALATION: Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation.

EFFECTS OF OVEREXPOSURE - INGESTION: No Information.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure to this material (or its components) has apparently been found to cause the following effects in laboratory animals: kidney damage, eye damage, liver damage.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT SKIN ABSORPTION INHALATION EYE CONTACT

SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT: Flush with large amounts of water, lifting upper and lower lids occasionally, get medical attention.

FIRST AID - SKIN CONTACT: Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use. Get medical attention if irritation persists.

FIRST AID - INHALATION: Remove individual to fresh air. If breathing is difficult, administer oxygen. Give artificial respiration if breathing has stopped. Keep person warm and quiet. Get medical attention.

FIRST AID - INGESTION: Do not induce vomiting. Give two glasses of water if conscious. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: -156 F
(PENSKEY-MARTENS C.C.)

LOWER EXPLOSIVE LIMIT: 2.2 %
UPPER EXPLOSIVE LIMIT: 12.8 %

AUTOIGNITION TEMPERATURE: N.D.

EXTINGUISHING MEDIA: CO2 DRY CHEMICAL FOAM WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and travel along the ground or may be moved by ventilation and ignited by ignition sources at locations distant from material handling point. For aerosol products - exposure to temperatures over 130F may cause containers to burst releasing highly flammable gas.

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive

(Continued on Page 3)

SECTION 5 - FIRE FIGHTING MEASURES

pressure mode when fighting fires. Keep fire exposed containers cool with water fog.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate sources of ignition & ventilate area. Persons not properly equipped should be excluded from area. Stop spill at source - prevent spreading. Avoid inhalation of vapors. Avoid skin contact with liquid. Soak up on absorbent material and place into proper container for disposal. Use non-sparking scoops for flammable materials. Clean walking surfaces thoroughly to reduce slipping hazard.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Containers of this material may be hazardous when emptied, since containers retain product residues (vapor, liquid, and/or solid). All hazard precautions given must be observed. Do not flame cut, braze or use welding torch on containers. Intentional misuse by deliberately concentrating and inhaling the vapors from this product may be harmful or fatal.

STORAGE: Do not store above 120F. Do not store in direct sunlight. Keep away from heat sources, open flame, pilot lights, sparks, and other sources of ignition. Do not store above 120F. Do not store in direct sunlight.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide sufficient mechanical ventilation (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

RESPIRATORY PROTECTION: If work place exposure limits of product or any component is exceeded, use a NIOSH/MSHA approved respirator. Consult your safety equipment supplier for recommendations.

SKIN PROTECTION: Wear impervious gloves if method of use involves skin contact with product. Consult your safety supply vendor for glove recommendations.

EYE PROTECTION: Wear safety glasses at minimum, more extensive protection may be necessary depending on how the product is to be used.

OTHER PROTECTIVE EQUIPMENT: Wear impervious clothing if bodily exposure is anticipated. Consult your safety supply vendor for recommendations.

HYGIENIC PRACTICES: Wash hands before eating or smoking. Smoke in designated areas only. Remove and launder clothing if contaminated.

(Continued on Page 4)

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE	: -44 - 133 F	VAPOR DENSITY	: Is heavier than air
ODOR	: MINT WHEN WET	ODOR THRESHOLD	: N.D.
APPEARANCE	: CLEAR LIQUID	EVAPORATION RATE	: Is faster than Butyl Acetate
SOLUBILITY IN H2O	: MOSTLY SOLUBLE	SPECIFIC GRAVITY	: 0.7253
FREEZE POINT	: N.D.	pH @ 0.0 %	: N.D.
VAPOR PRESSURE	: N.D.	VISCOSITY	: N.D.
PHYSICAL STATE	: LIQUID		
COEFFICIENT OF WATER/OIL DISTRIBUTION	: N.D.		

(See Section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Heat, sparks, welding arcs, open flame, pilot lights, static electricity or other source of ignition.

INCOMPATIBILITY: acids, strong oxidizers,

HAZARDOUS DECOMPOSITION PRODUCTS: carbon monoxide and carbon dioxide, various hydrocarbons,

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

No product or component toxicological information is available.

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Information.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with all local, state and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Aerosols

DOT TECHNICAL NAME:

DOT HAZARD CLASS: 2.1

HAZARD SUBCLASS: NONE

(Continued on Page 5)

SECTION 14 - TRANSPORTATION INFORMATION

DOT UN/NA NUMBER: UN1950 PACKING GROUP: NONE RESP. GUIDE PAGE: 126

ADDITIONAL INFORMATION:: For domestic ground and air shipment this product may be shipped as a Consumer Commodity ORM-D. Outer cartons must have the ORM-D or ORM-D AIR designation. (our original cartons are preprinted with the ORM-D designation for ground shipment)

SECTION 15 - REGULATORY INFORMATION

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: On June 30, 1993 the OSHA Z-1-A table was revoked and OSHA reverted back to their prior exposure limits. The values on this MSDS reflect the roll back to the prior values. Some states may continue to enforce the 1993 limits. On June 16, 1995 EPA announced in a final rule that acetone would no longer be considered a VOC for air attainment standards. (it is now an exempt compound) The VOC calculations on this MSDS are based on acetone being an exempt compound. The June 16 rule also removed acetone from the list of SARA 313 reportable chemicals.

(Continued on Page 6)

SECTION 16 - OTHER INFORMATION

HMIS RATINGS - HEALTH: 2 FLAMMABILITY: 4 REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 09/18/03

REASON FOR REVISION: NEW FORMULA

VOC CONTENT: 20.1 % BY WEIGHT, 142 GRAMS/LITER TOTAL PRODUCT,
507 GRAMS/LITER LESS WATER AND EXEMPT, 0.18 LBS/CANLEGEND: N.A. - Not Applicable, N.E. - Not Established,
N.D. - Not Determined

:

The information contained on this MSDS is been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations. The environmental information and hazardous materials identification system have been included by Camie-Campbell Inc. in order to provide additional health and hazard classification information. The ratings recommend are based upon the criteria supplied by the developers of these rating systems, together with Camie-Campbell Inc.'s interpretation of the available data. Proper personal protective equipment varies widely with conditions of use and anticipated exposure. We recommend that a supervisor or other qualified person determine proper PPE for intended use.

<END OF MSDS>

Appendix G
MSDSs for Baseline Cleaners for Toxicity Comparison

MSDS - Material Safety Data Sheet**Product Name: ENGINE BRITE HEAVY DUTY ENGINE DEGREASER**

MSDS No.: ERI

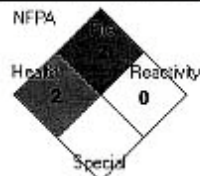
I. Basic Information:

Manufacturer: RADIATOR SPECIALTY COMPANY
 Address: P.O. BOX 159, 600 RADIATOR ROAD
 City, ST Zip: INDIAN TRAIL, NC 28079
 Emergency Contact: Rocky Mountain Poison Control Center
 Emergency Telephone Number: 303-623-5716
 Contact: Robert Geer

Information Telephone Number: 704-586-3430

Last Update: 02/19/2003

Chemical State: ☒ Liquid ☐ Gas ☐ Solid
 Chemical Type: ☐ Pure ☒ Mixture



2	Health
0	Reactivity
B	Pers. Protection

II. Ingredients:☐ Trade Secret

CAS No.	Chemical Name	% Range	EHS		IARC		SARA 313 SUB Z	OSHA PEL	ACGIH TLV	Other Limits
			NTP							
111762	2-Butoxyethanol	1-2					X	25 ppm	25 ppm	
78330128	Alkyl Aryl Sulfonate	<1								5 mg/m
124389	Carbon dioxide	1-3							5000 ppm	
9016459	Ethoxylated Nonyl Phenol	3-5						N/D	N/D	
68476346	Petroleum distillate, Aliphatic	80-88							100 ppm	
64742945	Petroleum naphtha	6-9					X	Not Establi	100 ppm	100 pp

III. Hazardous Identification:

Hazard Category:

☒ Acute ☐ Chronic ☒ Fire ☒ Pressure ☐ Reactive

Hazardous Identification Information:

Flammable. Harmful or Fatal if Swallowed. Eye and Skin Irritant. Contents Under Pressure.

Level 3 Aerosol

IV. First Aid Measures:

Route(s) of Entry:

Absorption, Eye, Inhalation, and Ingestion.

Health Hazards (Acute and Chronic):

Signs and Symptoms:

Eye Contact: Irritant. Prolonged contact may cause conjunctivitis.

Skin Contact: Irritant. Defatting of tissue, dermatitis may occur.

Inhalation: Irritant to mucous membranes. Repeated exposure may cause narcosis.

Ingestion: HARMFUL OR FATAL IF SWALLOWED.

MSDS - Material Safety Data Sheet**Product Name: ENGINE BRITE HEAVY DUTY ENGINE DEGREASER****MSDS No.: EBI****Medical Conditions Generally Aggravated by Exposure:****Emergency and First Aid Procedures:**

Eye Contact: Flush eyes with clean water for 15 minutes while lifting eyelids. Get prompt medical attention.
Skin Contact: Wash with soap and water thoroughly. If adverse effects persist, get prompt medical attention. Launder contaminated clothing before reuse.
Inhalation: Remove to fresh air. If breathing becomes difficult give oxygen and get prompt medical attention. If breathing stops, give artificial respiration and get prompt medical attention.
Ingestion: DO NOT INDUCE VOMITING! Call Poison Control Center, physician, or hospital emergency room immediately.
Aspiration of vomitus into the lungs can cause pneumonitis, which can be fatal.

Other Health Warnings:

Vomiting and subsequent aspiration into the lungs may lead to chemical pneumonia and pulmonary edema which is a potentially fatal condition.

V. Fire Fighting Measures:**Flash Point:** 165°F**Lower Explosive Limit:** NE**Upper Explosive Limit:** NE**F.P. Method:** TOC**Fire Extinguishing Media:** Water Fog, Foam, Carbon Dioxide, Dry Chemical**Special Fire Fighting Procedures:**

Wear self-contained positive pressure breathing apparatus and protective clothes. Cool containers with a water fog. Do not use forced water stream as this could cause the fire to spread. Use shield to protect from rupturing and venting containers.

Unusual Fire and Explosion:

At elevated temperatures containers may vent, rupture or burst, even violently

VI. Accidental Release Measures:**Steps to be Taken in Case Material is Released or Spilled:**

Eliminate all ignition sources. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc). Using a non-metallic scoop, place contaminated material into an approved chemical waste container. Where possible, vacuum spilled liquid using an explosion proof vacuum to recover material. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred.

VII. Handling and Storage:**Precautions to be Taken:**

Handling: Use with adequate ventilation and proper protective equipment.
Do not use near fire, sparks, or flame. Do not puncture or incinerate container.
Store in cool, well ventilated area below 120°F away from heat sources.

Other Precautions:

Avoid contact with eyes. Avoid prolonged or repeated breathing of vapors. If exposure may or does exceed occupational exposure limits, use a NIOSH approved respirator to prevent over-exposure.

MSDS - Material Safety Data Sheet**Product Name: ENGINE BRITE HEAVY DUTY ENGINE DEGREASER**

MSDS No.: EBI

VIII. Exposure Controls/Personal Protection:**Ventilation Requirements:**

See Section 2 for applicable exposure limits. Use with adequate ventilation. If TLV is exceeded, wear NIOSH approved respirator.

Personal Protective Equipment:

See Section 2 for applicable exposure limits. For prolonged exposure wear protective safety glasses, gloves, and apron.

IX. Physical and Chemical Properties:**Boiling Point:** 305°F**Melting Point:** N/A**Evaporation Rate (Butyl Acetate = 1):** N/D**Vapor Pressure (mm Hg.):** N/D**Specific Gravity (H₂O = 1):** 0.68000**Vapor Density (AIR = 1):** 1.2**Solubility in Water:** Emulsifies**Appearance and Odor:** Amber liquid with petroleum odor**Other Information:****X. Stability and Reactivity:****Stability:**

Stable

Incompatibility (Materials to Avoid):

Strong oxidizing agents.

Decomposition/By Products:

High temperatures and ignition sources produce products of combustion: carbon monoxide, sulfur-like smoke.

Hazardous Polymerization:

Will not occur.

XI. Toxicological Information:

N/D

XII. Ecological Information:

N/D

XIII. Disposal Considerations:

DISPOSAL: This container may be recycled in aerosol recycling centers when empty. Before offering for recycling, empty the can by using the product according to the label. DO NOT PUNCTURE! If recycling is not available, wrap the container and discard in the trash. Dispose of unused product in accordance with all local, state government and federal laws and regulations.

XIV. Transport Information:**DOT Hazard Class:** ORM-D**Shipping Name:** Consumer Commodity

MSDS - Material Safety Data Sheet**Product Name: ENGINE BRITE HEAVY DUTY ENGINE DEGREASER****MSDS No.: EB1****XV. Regulatory Information:**

See Section 2 for SARA Reportable Chemicals.

USA TSCA: All components of this material are listed on the US TSCA Inventory.

Warning: This product contains a chemical(s) known to the State of California to cause cancer or birth defects or other reproductive harm.

XVI. Other Information:Do not used in confined areas without proper ventilation. Contact lenses may cause further damage in case of splash into eye.
KEEP AWAY FROM CHILDREN AND ANIMALS!

N/E: Not Established

N/D: Not Determined

N/A: Not Applicable

N/AV: Not Available

While Radiator Specialty Company believes this data is accurate as of the revision date, we make no warranty with respect to the data and we expressly disclaim all liability for reliance thereon. The data is offered solely for information, investigation, and verification. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this MSDS. The user is responsible for full compliance.

MATERIAL SAFETY DATA SHEET

24 HOUR EMERGENCY NUMBER: CHEMTREC 1-800-424-9300
MOC PRODUCTS CO., INC.: INFORMATION 1-818-895-2258

PRODUCT NAME: THROTTLE-BODY & AIR-INTAKE CLN

MSDS CODE: 1032
NFPA CODES: H F R
3 4 0

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: MOC PRODUCTS CO., INC.
ADDRESS: 12306 MONTAGUE STREET
PACIFIC, CA 91331

DATE PRINTED: 02/09/04 DATE REVISED: 02/05/2004
NAME OF PREPARER: YULIN GU

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

REPORTABLE COMPONENTS PEL/OSHA	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
ACETONE 750 PPM	67-64-1		40-50
9% TOLUENE 100 PPM	108-88-3		40-50
* METHYL ALCOHOL 200 PPM - SKIN	67-56-1		1-5

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: <100 F SPECIFIC GRAVITY (H2O=1): 0.83
VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER
SOLUBILITY IN WATER: NOT SOLUBLE IN WATER ODOR: SOLVENT
APPEARANCE: CLEAR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: <40 F METHOD USED: N/A UPPER: NO DATA
FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: NO DATA
EXTINGUISHING MEDIA: USE REGULAR FOAM, DRY CHEMICAL, OR CO2.
SPECIAL FIREFIGHTING PROCEDURES:
EXTREMELY FLAMMABLE! KEEP AWAY FROM HEAT, SPARKS, OPEN FLAME AND ALL OTHER SOURCES OF IGNITION. USE WITH ADEQUATE VENTILATION.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR BE MOVED BY AIR CURRENTS AND IGNITED BY HEAT. PILOT LIGHTS, OTHER FLAMES AND IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT.

SECTION V - REACTIVITY DATA

STABILITY: STABLE
INCOMPATIBILITY (MATERIALS TO AVOID):
AVOID CONTACT WITH ACIDS AND STRONG OXIDIZERS
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
BURNING MAY PRODUCE OXIDES OF CARBON AND TRACE OF HYDROCARBONS.
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VI - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: (ACUTE AND CHRONIC)
EYES - CAN CAUSE IRRITATION
SKIN - PROLONGED OR REPEATED CONTACT CAN CAUSE MODERATE IRRITATION, DEFATTING AND DERMATITIS
INGESTION - CAN CAUSE GASTRO-INTESTINAL, NAUSEA, VOMITING, AND DIARRHEA.

CARCINOGENICITY: MTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: Yes
N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
PREEXISTING SKIN, EYE, AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO PRODUCT

EMERGENCY AND FIRST AID PROCEDURES:

MATERIAL SAFETY DATA SHEET

SKIN - IMMEDIATELY FLUSH SKIN WITH PLENTY OF RUNNING WATER FOR AT LEAST 30 MINUTES. REMOVE CONTAMINATED CLOTHING AND FOOTWEAR. WASH BEFORE REUSE.

EYES - FLUSH IMMEDIATELY WITH LARGE AMOUNT OF WATER FOR AT LEAST 15 MINUTES. CONSULT A PHYSICIAN

INHALATION - IF AFFECTED, REMOVE INDIVIDUAL TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF BREATHING STOPS, GET MEDICAL ATTENTION IMMEDIATELY.

PRIMARY ROUTES OF ENTRY: SKIN, INHALATION

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

ABSORB THE LARGE SPILL WITH PLENTY OF ABSORBENT MATERIAL. WASH THE RESIDUE DOWN THE DRAIN OR PIT WITH PLENTY OF WATER. USE PLENTY OF WATER ON SMALL SPILLS.

WASTE DISPOSAL METHOD:

DISPOSE OF ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS FOR YOUR AREA.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

STORE BETWEEN 40 AND 120 F

PROTECT FROM PHYSICAL DAMAGE, AND KEEP TIGHTLY CLOSED.

OTHER PRECAUTIONS: N/A

SECTION VIII - PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION: AN APPROPRIATE APPROVED HYDROCARBON CANISTER FOR ORGANIC VAPOR SHOULD BE WORN IF EXPOSURE WILL BE PROLONGED.

VENTILATION: PROVIDE SUFFICIENT MECHANICAL VENTILATION.

PROTECTIVE GLOVES: WEAR CHEMICAL RESISTANT GLOVES SUCH AS NITRILE RUBBER, PVC, ETC.

EYE PROTECTION: WEAR SAFETY GLASSES

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK/HYGIENIC PRACTICES:

EYE WASH AND SAFETY SHOWER SHOULD BE EASILY ACCESSIBLE. PROVIDE ADEQUATE VENTILATION. AVOID CONTACT WITH EYES AND SKIN. AVOID INHALATION OF PRODUCT VAPORS. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING, DRINKING OR SMOKING.

SECTION IX - STATE REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR OTHER REPRODUCTIVE HARM:

TOLUENE (REPRODUCTIVE HARM); BENZENE (CANCER);

SECTION X - PRECAUTION AND OTHER COMMENTS

ATTENTION:

TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE. HOWEVER, MDC PRODUCTS DOES NOT ASSUME ANY LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF THIS INFORMATION. FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE RESPONSIBILITY OF THE USER. ALL MATERIALS MAY PRESENT UNKNOWN HEALTH HAZARD & SHOULD BE USED WITH CAUTION. ANY PRODUCT USE, WHICH IS NOT IN CONFORMANCE WITH THIS DATA SHEET, OR WHICH INVOLVES USING THE PRODUCT IN COMBINATION WITH ANY OTHER PROCESS, IS THE SOLE RESPONSIBILITY OF THE USER.

END OF MSDS

PRODUCT NAME: THROTTLE-BODY & AIR-INTAKE CLN

MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: Brakleen® Brake Parts Cleaner - Non-Chlorinated
Product Number (s): 05084, 05084-6

Manufactured By: CRC Industries, Inc. (215) 674-4300
885 Louis Drive, Warminster, PA 18974
24-Hour Emergency Information: CHEMTREC (800) 424-9300

Section 2: Composition/Information on Ingredients

Component	CAS NUMBER	ACGIH TLV	OSHA PEL	OTHER LIMITS	%
Toluene	108-88-3	100 ppm	100 ppm	NE	22-32
Methanol	67-56-1	200 ppm	200 ppm	NE	15-25
Acetone	67-64-1	750 ppm	750 ppm	NE	45-55
Carbon Dioxide	124-38-9	5000 ppm	10000 ppm	NE	< 10

Section 3: Hazards Identification

Emergency Overview

Appearance & Odor: Clear, water-white liquid.

Danger: Extremely Flammable. Vapor Harmful. Harmful or Fatal if Swallowed. May be fatal or cause blindness if swallowed. Eye and skin irritant. Contents Under Pressure.

Potential Health Effects:

Inhalation: Dizziness, breathing difficulties, anesthetic effects, nausea and irritation to respiratory tract.
Eyes: Irritation
Skin: Irritation, defatting
Ingestion: NA
Carcinogenicity: OSHA: No IARC: No NTP: No
Chronic Overexposure: Contact dermatitis. Chronic overexposure may cause nervous system damage.
Medical Conditions Aggravated by Exposure: Breathing problems.

Section 4: First Aid Measures

Inhalation: Remove to fresh air. Give artificial respiration if necessary.
Eyes: Flush with large amounts of water for 15 minutes.
Skin: Remove contaminated clothing and wash area with soap and water.
Ingestion: Call a physician. Do not induce vomiting.

Product Name: Brakleen® Brake Parts Cleaner - Non-Chlorinated**Product Number (s): 05084, 05084-6****Section 5: Fire-Fighting Measures**

Flashpoint:	< 0°F	Method:	TCC	LEL:	1.0	UEL:	13.0
Extinguishing Media:	CO ₂ , foam and fog						
Hazardous Combustion Products:	CO ₂ , carbon monoxide						
Fire-fighting Instructions:	Remove containers from fire area if possible. Use self-contained breathing apparatus for fire fighting. Aerosol cans may explode if heated above 120°F.						
NFPA:	Health:	2	Flammability:	3	Reactivity:	0	
HMIS:	Health:	2	Flammability:	3	Reactivity:	0	PPE: B

Section 6: Accidental Release Measures

Spill/Leak Procedures: Usually not a problem with aerosols. Area should be ventilated. Absorbent should be used to pick up excess material. All used and unused product should be disposed of in accordance with federal, state and local regulations.

Section 7: Handling and Storage

Handling Procedures: Store in a cool, dry area. Aerosol cans must be maintained below 120°F to prevent cans from exploding.

Aerosol Level: III

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Adequate to prevent accumulation of vapors. Use mechanical means if necessary to maintain levels below the exposure limits. If working in a confined space, follow applicable OSHA regulations.

Respiratory: Use NIOSH/MSHA compliant respirators or self-contained breathing apparatus above exposure limits. Follow OSHA regulations 29 CFR 1910.134.

Protective Clothing/Equipment: Wear chemically protective gloves and safety glasses. Use a splash apron and boots if splashing occurs.

Section 9: Physical & Chemical Properties

Physical State:	Liquid	Appearance & Odor:	Clear, water-white liquid
Specific Gravity:	0.815	Boiling Point:	131°F (initial)
Freezing Point:	ND	Vapor Pressure:	ND
Evaporation Rate:	fast	Vapor Density (air = 1)	ND
pH:	NA	Solubility:	Partially soluble in water. Soluble in most organic liquids.
Volatile Organic Compounds %:	45	g/L:	366
		lbs./gal:	3.0

Section 10: Stability and Reactivity

Stability:	Stable	Hazardous Polymerization:	No
Chemical Incompatibilities:	Strong oxidizers.		
Materials to Avoid:	Strong oxidizing agents and sources of ignition.		

Product Name: Brakleen® Brake Parts Cleaner - Non-Chlorinated

Product Number (s): 05084, 05084-6

Hazardous Decomposition Products: None

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. See Section 3 of this MSDS for acute symptoms of overexposure and carcinogenicity information.

Section 12: Ecological Information

Ecotoxicity: No data available.

Environmental Fate: No data available for biodegradation.

Section 13: Disposal Considerations

Disposal: This material if discarded may be hazardous waste under U.S. EPA RCRA regulations. All disposal activities must comply with federal, state and local regulations. Contact your local or state environmental agency for specific rules. Do not dump into sewers, on the ground or into any body of water.

Section 14: Transportation Information

Shipping Name: Consumer Commodity

Hazard Class: ORM-D

UN Number: NA

Packing Group: NA

Label: NA

Placard: NA

Special Provisions: NA

Section 15: Regulatory Information

TSCA: All components are either listed under TSCA or are exempt.

SARA Title III: Section 311/312: Acute, Pressure

Section 313*: Toluene, Methanol

CERCLA/Superfund (RQ): Mixture

Extremely Hazardous Substances: No

California Prop 65: This product contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

* See section 2 for percentage

Section 16: Additional Information

Prepared By: Michelle Milburn

Date: December 2, 2003

Technical Information: (800) 521-3168

CRC #: 594N

This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS: Chemical Abstract Service

NA: Not Applicable

ppm: Parts per Million

ND: Not Determined

TCC: Tag Closed Cup

NE: Not Established

LEL: Lower Explosive Limit

g/L: grams per Liter

UEL: Upper Explosive Limit

lbs./gal: pounds per gallon

PPE: Personal Protection Equipment

RQ: Reportable Quantity

COC: Cleveland Closed Cup